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EXAMINER	
DEAN, RAYMOND S	
ART UNIT	**PAPER NUMBER**
2684	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/030,798	SALONAHO ET AL.	
	Examiner	Art Unit	
	Raymond S. Dean	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 9, 11 - 24, 29, 31 - 37,46 - 160, 163 - 164* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 9, 11 - 24, 29, 31 - 37,46 - 160, 163 - 164* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *0102*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed September 14, 2005 have been fully considered but they are not persuasive.

Examiner respectfully disagrees with Applicants' assertion on Page 25, first paragraph of the remarks "however there is no disclosure for changing the current cell ...". The determination of the beacon route with the highest corrected field value occurs during a particular time period, after which the relay or cell with said highest corrected field value is selected. Charbonnier thus teaches the above limitation.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 3, 7 – 22, 25, 27 – 29, 33, 38 – 39, 43 – 47, 51 – 57, 61 – 69, 73 – 82, 86 – 95, 99 – 110, 114 – 126, 130 – 143, 147 – 160, 163 – 164 are rejected under 35 U.S.C. 102(e) as being anticipated by Charbonnier (5,241,686).

Regarding Claims 1, 29, Charbonnier teaches a method for selecting a new cell for a station in a cellular telecommunication system, said station being associated with a current cell, said method comprising the steps of: measuring at the station the strength of a communication from said current cell (Column 8 lines 19 – 22, Column 8 lines 41 – 57, Esubi is the strength of the communication); measuring at the station the strength of a communication from at least one other cell (Column 8 lines 41 – 57); decoding a communication from at least one of the current cell and the at least one other cell to obtain offset information (Column 2 lines 26 – 47, Column 9 lines 16 – 17, the offset information is the field correction parameter); modifying the measured strength of the communication from the at least one of the cell and the at least one other cell in dependence on the obtained offset information (Column 2 lines 26 – 47, Column 8 lines 41 – 57); comparing the measured strength of the communication from the current cell and the measured strength of the communication from the at least one other cell after the step of modifying (Column 8 lines 41 – 57); and depending on the results of said step of comparing, changing the current cell with which the station is associated, wherein the current cell is changed only if for a predetermined time period the measured strength of the communication from the at least one other cell exceeds the measured strength of the communication from the current cell (Column 8 lines 41 – 57, the determination of the beacon route with the highest corrected field value occurs during a particular time period, after which the relay or cell with said highest corrected field value is selected).

Regarding Claim 2, Charbonnier teaches all of the claimed limitations recited in Claim 1. Charbonnier further teaches a value is added to the measured strength of the communication from the at least one other cell (Column 8 lines 41 – 45).

Regarding Claim 3, Charbonnier teaches all of the claimed limitations recited in Claim 1. Charbonnier further teaches a function is applied to the measured strength of the communication from the at least one other cell (Column 8 lines 41 – 45).

Regarding Claims 7, 33, 34, Charbonnier teaches all of the claimed limitations recited in Claims 1, 2, 3. Charbonnier further teaches wherein the offset information as to how the measured strength of a communication from a neighboring cell is to be modified is in the communication from at least one other cell (Column 6 lines 59 – 68).

Regarding Claim 8, Charbonnier teaches all of the claimed limitations recited in Claim 7. Charbonnier further teaches wherein the station is provided with timing information defining when the station should next check for the offset information (Column 6 lines 59 – 68, the relays continuously broadcast the modifying information, when said relays broadcast said modifying information the mobile then reads said modifying information thus the reception of said modifying information is a cue to the mobile station to read said modifying information, since the broadcasting in done on a continuous or periodic basis the mobile station will check for said broadcast information on a continuous or periodic basis, the mobile station will therefore be provided with timing information enabling said mobile station to periodically read said modifying information).

Regarding Claim 9, Charbonnier teaches all of the claimed limitations recited in Claim 8. Charbonnier further teaches wherein the timing information is in the communication from the neighboring cell (Column 6 lines 59 – 68, the relays continuously broadcast the modifying information, when said relays broadcast said modifying information the mobile then reads said modifying information thus the reception of said modifying information is a cue to the mobile station that it is time to read said modifying information, the cue is therefore the timing information).

Regarding Claim 11, Charbonnier teaches all of the claimed limitations recited in Claim 1. Charbonnier further teaches wherein information defining the period of time is in the communication from the current cell (Column 8 lines 46 – 57, in order for another cell to be selected the value of the corrected field of said cell must be higher than the corrected field of the current cell for a predetermined period of time, said predetermined period of time will be obtained from the scanning of the beacon routes).

Regarding Claims 12, 46 – 47, 51 – 55, Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 9, 11, 164. Charbonnier further teaches wherein a value is added to the measured strength of the communication from the current cell prior to said step of comparing (Column 8 lines 41 – 50).

Regarding Claim 13, Charbonnier teaches all of the claimed limitations recited in Claim 12. Charbonnier further teaches wherein if the current cell is changed in said step of changing form an old current cell to a new current cell, the value is no longer added to the measured strength of the communication from the old current cell and a value is added to the measured strength of the communication from the new current cell

(Column 8 lines 46 – 50, as the mobile station moves the old current cell will eventually not be a part of cells that are scanned thus no correction parameter will not be added to beacon route for said old current cell).

Regarding Claim 14, 56 – 57, 61 – 67 Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 13. Charbonnier further teaches wherein the communication from the at least one of the current cell and the at least one other cell comprises the broadcast control channel (Column 4 lines 51 – 55, Column 6 lines 59 – 60, the beacon channel is the broadcast control channel).

Regarding Claims 15, 68 – 69, 73 – 80, Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 14. Charbonnier further teaches wherein the station has at least one common channel in the current cell (Column 4 lines 51 – 55, Column 6 lines 59 – 60, the beacon channel is the broadcast control channel, the broadcast control channel is a common channel).

Regarding Claims 16, 81 – 82, 86 – 93 Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 14. Charbonnier further teaches wherein the station has at least one dedicated channel in the current cell (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks, which have dedicated data channels).

Regarding Claims 17, 94 – 95, 99 – 108 Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 16. Charbonnier further teaches wherein the station is arranged to use the same frequency in the current cell and the at least one

other cell (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks, which conduct frequency reuse).

Regarding Claims 18, 109 – 110, 114 – 124 Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 17. Charbonnier further teaches wherein the station is a mobile terminal (Column 8 lines 19 – 22).

Regarding Claims 19, 125 – 126, 130 – 141 Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 18. Charbonnier further teaches wherein the telecommunication system is a code division multiple access system (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks).

Regarding Claims 20, 142 – 143, 147 – 159, Charbonnier teaches all of the claimed limitations recited in Claims 1 – 3, 7 – 19. Charbonnier further teaches wherein the telecommunication system is a time division multiple access system (Column 4 lines 11 – 13, cellular radio communication networks comprise TDMA networks).

Regarding Claims 21, 160, Charbonnier teaches all of the claimed limitations recited in Claims 19, 20. Charbonnier further teaches wherein the telecommunication system is code division/time division multiple access hybrid (Column 4 lines 11 – 13, cellular radio communication networks comprise hybrid CDMA/TDMA networks).

Regarding Claim 22, Charbonnier teaches a station for use in a cellular communication system, said station being associated with a current cell, said station comprising: means for measuring the received strength of a communication from said current cell (Column 8 lines 19 – 22, Column 8 lines 41 – 57, Esubi is the strength of the communication); means for measuring the received strength of a communication from at

least one other cell (Column 8 lines 41 – 57); means for decoding a communication from at least one of the current cell and the at least one other cell to obtain offset information (Column 2 lines 26 – 47, Column 9 lines 16 – 17, the offset information is the field correction parameter); means for modifying the measured strength of the communication from the at least one of the current cell and the at least one other cell in dependence on the obtained offset information (Column 2 lines 26 – 47, Column 8 lines 41 – 57); means for comparing the measured strength of the communication from the at least one other cell, and the measured received strength of the communication from the current cell, at least one of the measured strengths having been modified by the means for modifying (Column 8 lines 41 – 57); and means for changing, depending of the results of the comparison performed by the comparing means, the current cell with which the station is associated, wherein the current cell is changed only if for a predetermined time period the measured strength of the communication from the at least one other cell exceeds the measured strength of the communication from the current cell, at least one of the measured strengths having been modified by the means for modifying (Column 8 lines 41 – 57, the determination of the beacon route with the highest corrected field value occurs during a particular time period, after which the relay or cell with said highest corrected field value is selected).

Regarding Claim 163, Charbonnier teaches a station for use in a cellular communication system, said station being associated with a current cell, said station comprising: means for measuring the received strength of a communication from said current cell (Column 8 lines 19 – 22, Column 8 lines 41 – 57, Esubi is the strength of the

communication); means for measuring the received strength of a communication from at least one other cell (Column 8 lines 41 – 57); means for decoding a communication from at least one of the current cell and the at least one other cell to obtain offset information (Column 2 lines 26 – 47, Column 9 lines 16 – 17, the offset information is the field correction parameter); means for modifying the measured strength of the communication from the at least one of the current cell and the at least one other cell in dependence on the obtained offset information (Column 2 lines 26 – 47, Column 8 lines 41 – 57); means for comparing the measured strength of the communication from the at least one other cell, and the measured received strength of the communication from the current cell, at least one of the measured strengths having been modified by the means for modifying (Column 8 lines 41 – 57); and means for changing, depending of the results of the comparison performed by the comparing means, the current cell with which the station is associated, wherein the current cell is changed only if for a predetermined time period the measured strength of the communication from the at least one other cell exceeds the measured strength of the communication from the current cell, at least one of the measured strengths having been modified by the means for modifying (Column 8 lines 41 – 57, the determination of the beacon route with the highest corrected field value occurs during a particular time period, after which the relay or cell with said highest corrected field value is selected); and a network element for sending communications to the station, said network element being arranged to send offset information to the station (Column 9 lines 16 – 17, the relay is a network element), the offset information being used by the station to modify measurements of the strength

of communications from at least one other cell (Column 2 lines 26 – 47, Column 8 lines 41 – 57).

Regarding Claim 164, Charbonnier teaches all of the claimed limitations recited in Claim 163. Charbonnier further teaches wherein the step of decoding a communication is dependent upon the measured strength of the communication satisfying a predetermined condition (Column 2 lines 26 – 47, Column 9 lines 16 – 17, in order for the field correction parameter to be properly received the signal strength must meet a minimum received signal strength threshold).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 4 – 6, 23 – 24, 26, 30 – 32, 35 – 37, 40 – 42, 48 – 50, 58 – 60, 70 – 72, 83 – 85, 96 – 98, 111 – 113, 127 – 129, 144 – 146 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charbonnier (5,241,686) in view of Karlsson (5,640,677).

Regarding Claim 4, Charbonnier teaches all of the claimed limitations recited in Claim 164. Charbonnier does not teach wherein the predetermined condition is that the measured strength of the communication from the at least one other cell is greater than a threshold.

Karlsson teaches a predetermined condition that the measured strength of the communication from the at least one other cell is greater than a threshold (Column 11 lines 25 – 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the predetermined condition taught above by Karlsson in the wireless system of Charbonnier as an alternative means for selecting the best server cell for the mobile station thereby enabling reliable communication links to be maintained as said mobile station changes geographic locations as taught by Karlsson.

Regarding Claim 5, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claim 4. Karlsson further teaches wherein the threshold is defined relative to the measured strength of the communication from the current cell (Column 11 lines 25 – 28, in order for the neighbor cell to be selected the threshold must be higher than the strength of the communication from the current cell thus said threshold will be defined relative to the strength of the communication from the current cell).

Regarding Claim 6, 32, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4, 6. Karlsson further teaches wherein information defining the threshold is included in the communication from the current cell (Column 10 lines 3 – 8, Column 10 lines 63 – 67, Column 11 lines 1 – 3, Column 11 lines 10 – 11).

Regarding Claim 23, Charbonnier teaches all of the claimed limitations recited in Claim 22. Charbonnier does not teach said at least one other station requiring a different procedure in order to determine if a new current cell is required.

Karlsson teaches at least one other station requiring a different procedure in order to determine if a new current cell is required (Column 11 lines 25 – 28, the procedure is based on the threshold for the neighbor cell).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the different procedure taught above by Karlsson in the wireless system of Charbonnier as an alternative means for selecting the best server cell for the mobile station thereby enabling reliable communication links to be maintained as said mobile station changes geographic locations as taught by Karlsson.

Regarding Claim 24, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claim 23. Charbonnier teaches wherein the signaling sent by said network to said at least one station and to said at least one other station is dependent on the procedure required by the respective stations to determine if a new current cell is required (Column 6 lines 59 – 68, the correction parameters are broadcasted because the procedure for selecting a new current cell depends on said correction parameters unlike the threshold procedure of Karlsson as described above, which does not depend on said correction parameters).

Regarding Claim 31, Charbonnier teaches all of the claimed limitations recited in Claim 3. Charbonnier does not teach wherein the predetermined condition is that the measured strength of the communication from the at least one other cell is greater than a threshold.

Karlsson teaches a predetermined condition that the measured strength of the communication from the at least one other cell is greater than a threshold (Column 11 lines 25 – 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the predetermined condition taught above by Karlsson in the wireless system of Charbonnier as an alternative means for selecting the best server cell for the mobile station thereby enabling reliable communication links to be maintained as said mobile station changes geographic locations as taught by Karlsson.

Regarding Claims 35 – 37, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein offset information as to how the measured strength of a communication from a neighboring cell is to be modified is in the communication from at least one other cell (Column 6 lines 59 – 68).

Regarding Claims 48 – 50, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein a value is added to the measured strength of the communication from the current cell prior to the comparing step (Column 8 lines 41 – 50).

Regarding Claims 58 – 60, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the communication from the at least one of the current cell and the at least one other cell comprises the broadcast control channel (Column 4 lines 51 – 55, Column 6 lines 59 – 60, the beacon channel is the broadcast control channel).

Regarding Claims 70 – 72, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein said station has at least one common channel in the current cell (Column 4 lines 51 – 55, Column 6 lines 59 – 60, the beacon channel is the broadcast control channel, the broadcast control channel is a common channel).

Regarding Claims 83 – 85, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the station has at least one dedicated channel in the current cell (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks, which have dedicated data channels).

Regarding Claims 96 – 98, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the station is arranged to use the same frequency in the current cell and the at least one other cell (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks, which conduct frequency reuse).

Regarding Claims 111 – 113, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the station is a mobile terminal (Column 8 lines 19 – 22).

Regarding Claims 127 – 129, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the telecommunication system is a code division multiple access system (Column 4 lines 11 – 13, cellular radio communication networks comprise CDMA networks).

Regarding Claims 144 – 146, Charbonnier in view of Karlsson teaches all of the claimed limitations recited in Claims 4 – 6. Charbonnier further teaches wherein the telecommunication system is a time division multiple access system (Column 4 lines 11 – 13, cellular radio communication networks comprise TDMA networks).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S. Dean whose telephone number is 571-272-7877. The examiner can normally be reached on 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Raymond S. Dean
November 8, 2005

EDAN ORGAD
PATENT EXAMINER/TELECOMM.
11/11/05